



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,635	02/19/2002	Osamu Samuel Nakagawa	10011548-1	2594

7590 05/30/2006

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

FREJD, RUSSELL WARREN

ART UNIT PAPER NUMBER

2128

DATE MAILED: 05/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/076,635

Applicant(s)

NAKAGAWA ET AL.

Examiner

Russell Frejd

Art Unit

2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

In re Application of: Nakagawa et al.

Examination of Application #10/076,635

1. Claims 1-38 of application 10/076,635, filed on 19-February-2002, are presented for examination. This communication is a follow-up of the Withdrawal from Issue dated 23-March-2006.

Claim Rejections under 35 U.S.C. § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title.

2.1 Claims 1-38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The invention claims (claim 1 preamble), "*A method to design a layout for an Internet Datacenter (IDC) cooling*".

2.2 MPEP Section 2106(IV)(B)(2)(b)(ii) provides that a statutory computer process is determined not by how the computer performs the process, but by what the computer does to achieve a practical application with a useful, concrete and tangible result. For example, a computer process that simply calculates a mathematical algorithm that models noise is nonstatutory, while a claimed process for digitally filtering noise employing the mathematical algorithm is statutory. The long line of cases in this area that are referred to in MPEP Section 2106(IV)(B)(2)(b)(ii) exemplify this requirement, by utilizing in the claim language, terms such as controlling, executing, changing and removing. In view of the aforementioned requirement and

In re Application of: Nakagawa et al.

the interim guidelines for 101 eligibility, the Examiner respectfully contends that the claim language of independent claims 1, 17 and 32, do not claim a practical application with a tangible result, that language claiming: (in claim 1) **defining** (emphasis added) the IDC; **pre-characterizing** the cells; **determining** an arrangement; and **determining** a profile.

Similarly, claims 17 and 32 are directed to a system for designing the layout of the IDC, comprised of software modules (i.e. "means") for completing the steps for defining, pre-characterizing , and determining the layout.

2.3 For at least these reasons, the Examiner respectfully posits that the claims of the present invention do not meet the criteria for a statutory process. Accordingly, the claims are determined to be a program per se, consisting of software modules that implement the method including a first circuit model that models a circuit, whereby the method does not manipulate appropriate subject matter, and thus cannot constitute a statutory process (MPEP Section 2106(IV)(B)(2)(c)).

2.4 Furthermore, claim 17 is determined to not meet the criteria for a statutory process due to the examiner's interpretation of "a definition module stored in a computerized system". The examiner interprets this limitation to include "signals", and directs applicant's attention to the specification on page 12, where the following statement is found, "Exemplary computer readable **signals**, whether modulated using a **carrier** or not, are signals that a computer system hosting or running the computer program may be configured to access..." (emphasis added). In view of the interim guidelines for 101 subject matter, the carrier wave signals of claim 17 do not manipulate appropriate subject matter, and thus cannot constitute a statutory process under 35 U.S.C. § 101.

In re Application of: Nakagawa et al.

Claim Rejections under 35 U.S.C. § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering the objective evidence present in the application indicating obviousness or nonobviousness.

3.1 Claims 1, 2, 17, 18 and 32 are rejected under 35 U.S.C. 103 as being obvious over Snevely, US PGPub 2003/0115024.

Snevely disclosed the invention substantially as claimed, including (in regard to claims 1, 17 and 32): a computer-implemented method to design a layout for an Internet Datacenter (IDC) cooling (the software-based (i.e. the “modules” of claim 17) design or configuration of a datacenter itself, e.g. architecture, construction, remodeling and/or the configuration of the equipment to be installed [0008, 0019];

defining in a computer the IDC as a collection of cells (the defining zone containing different types of equipment [0034-0035 and Fig. 1];

In re Application of: Nakagawa et al.

pre-characterizing the cells of the IDC (the disclosure of each of the different equipment types within the zone being associated with the zone's requirements and characteristics) [0038-0041, Figs. 1 and 2];

determining the arrangement of the cells within the IDC (arranging each of the equipment types contained in each zone using an equipment plan such as, how many pieces of

each type or model of equipment and their configuration [0037, 0041, 0044, 0047, Figs. 1 and 2]; and

determining a profile for one or more parameters of interest for each cell (the model for computing equipment requirements based on datacenter capacities) [0059, Fig. 4].

Snevely teaches the claimed Internet Datacenter as a method implemented in software executing on a computer system, such as a method for selecting equipment to be installed in a datacenter based on various capacities of the datacenter. The disclosure of the claimed invention includes "cells", which are used to define certain characteristics, for example, "spaces" like air conditioning units, a ceiling, a subfloor, etc. [see p. 4, lines 11-17]. The claimed "cell" is subject to more than one interpretation, and at least would render the prior art applicable. For this reason, a person of ordinary skill in the art at the time of the invention would equate the claimed "cell" with the "zones" disclosed by Snevely. The claimed invention as a whole is obvious over the prior art which teaches designing a datacenter with "zones", an equivalent interpretation of the claimed "cell". Support for this conclusion is based on the Snevely teachings of designing a datacenter with equipment having various capacities and requirements, whereby the individual requirements of each piece of equipment are adequately considered

In re Application of: Nakagawa et al.

[0006]. For this reason, Snevely provides the motivation to make the claimed “cell” in the expectation that it would have a similarly designed datacenter.

According to MPEP 2144, at 692, 16 USPQ2d at 1900, the court held “it is not necessary in order to establish a prima facie case of obviousness...that there be a suggestion or expectation from the prior art that the claimed [invention] will have the same or a similar utility as one newly discovered by applicant,” and concluded that here a prima facie case was established because “the art provided the motivation to make the claimed compositions in the expectation that they would have similar properties.” 919 F.2d at 693, 16 USPQ2d at 1901 (emphasis in original).

In regard to claims 2 and 18, an air flow rate parameter [0041].

Claim Objections

4. Claims 3-16, 19-31 and 33-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response Guidelines

5. A shortened statutory period for response to this action is set to expire **3 (three) months and 0 (zero) days** from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned (see MPEP 710.02, 710.02(b)).

In re Application of: Nakagawa et al.

5.1 Any response to the Examiner in regard to this non-final action should be

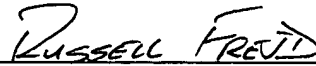
directed to: Russell Frejd, telephone number (571) 272-3779, Monday-Friday from 0530 to 1400 ET, or the examiner's supervisor, Kamini Shah, telephone number (571) 272-2279. Inquires of a general nature or relating to the status of this application should be directed to the TC2100 Group Receptionist (571) 272-2100.

mailed to: Commissioner of Patents and Trademarks
P.O. Box 1450, Alexandria, VA 22313-1450

or faxed to: (571) 273-8300

Hand-delivered responses should be brought to the Customer Service Window, Randolph Building, 401 Dulany Street, Alexandria, VA, 22314.

Date: 23-May-2006

A handwritten signature in cursive script that reads "Russell Frejd". The signature is written in dark ink and is positioned above a horizontal line.

**RUSSELL FREJD
PRIMARY EXAMINER**